# Chapter 9 Regional Competitiveness: Theoretical and Empirical Aspects

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# **ABSTRACT**

The aim of the chapter was to model the impact of selected determinants (trade openness, human capital, entrepreneurship, and innovation) on regional competitiveness, as well as to propose future activities and measures required to be implemented to improve the competitive performance of the regions. The research was conducted on the sample of 18 regions in six European countries: Serbia, Croatia, Slovenia, Northern Macedonia, Montenegro, and Romania. The database was prepared, and the statistical processing was performed in SPSS. In this data analysis, the following methods were used: comparative analysis, correlation, and regression analysis. The results of the research showed that the impact of the determinants—import dependence, the number of pupils enrolled in secondary education, gross domestic expenditure on research and development, and the number of companies per 10,000 inhabitants on the competitiveness of the region—are (statistically) significant.

# INTRODUCTION

What are the definitions of competitiveness, in the literature? According to the definition of World Economic Forum, competitiveness is a set of institutions, policies and factors that determine the level of productivity of a country (Schwab & Porter, 2018; Krstić et al., 2020b; Krstić et al., 2016b; Radivojević et al., 2019b). At the micro level, competitiveness is defined as the ability of firms to compete, grow, and be profitable (Martin et al., 2006; Powell, 2001), or the ability of a firm to produce and sell products and services at a price lower than the competition (International Institute of Management Development, 2000). Between micro and macro level of competitiveness, regional competitiveness is defined.

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### Regional Competitiveness

One of the most frequently used definitions of regional competitiveness is the European Commission's definition, according to which, "the competitiveness of a region is its ability to produce goods and services that meet the requirements of the domestic and world market in terms of price, quality, etc., maintaining a high and sustainable level of income, or, more generally, the region's ability to generate, under external competitive pressures, a relatively high level of income and employment" (European Commission, 1999, p. 75).

What needs to be pointed out is that the concept of regional competitiveness has expanded over time, so that it includes the potential (or the strength) of the region or locality to create a sufficient level of export to achieve a sustainable level of income (and full employment) of the population. On the other hand, regional competitiveness is observed and analyzed as a result of the influence of several factors, and the most important are: (1) the business infrastructure; (2) availability and quality of human resources; (3) the production environment, etc. (European Commission, 2004).

Kitson and co-workers suggest that although theorists often use the term "regional competitiveness", it remains complex and controversial. "We are far from a consensus on what is meant by this term" (Kitson et al., 2004, p. 992). This is confirmed by numerous definitions of regional competitiveness that can be found in the literature. For example, Huggins believes that regional (or the local) competitiveness refers to conditions that allow companies to compete in selected markets and create value within a particular region (Huggins, 2003). Imre Lengyel and Mikosh Lukovic gave an overview of the competitiveness of Hungarian regions, using indicators, such as: GDP per capita, labor productivity, employment rate, etc. (Lengyel & Lukovic, 2006). Huggins and Davies created the European Competitiveness Index that measures the competitiveness of 27 European countries and 118 regions. In the report, the authors emphasize the role of knowledge, creativity and infrastructure for the analysis of regional competitiveness (Huggins & Davies, 2006). The Polish Regional Competitiveness index was calculated by Bronisz, Heiman and Miszczuk. They ranked 16 NUTS 2 Polish regions based on the weighting system used in the calculation of the final value of the Regional Competitiveness Index (Bronisz et al., 2008).

Due to the complexity of the concept of "regional or local competitiveness", often there are basics of determinants ((in terms of definitions)) within the regional competitiveness model. Modeling regional competitiveness using dual prices is found in Omoregie and Thomson's work (Omoregie & Thomson, 2001), and a similar approach is taken by Gardiner, Martin and Tyler (Gardiner et al., 2004) and Lengyel and Lukovics (Lengyel & Lukovics, 2006). Lukovics emphasizes the importance of the pyramid model and its application in many studies, because it follows the definition of competitiveness of the European Commission in a simple and logical way, and includes all the most important factors (Lukovics, 2007). The review of the conceptual model of regional competitiveness in the form of a "hat" was given by the European Commission (European Commission, 2004). It points out that GDP per capita as an indicator of competitiveness coincides well with the perspectives of EU regional policy, for example, with the aim of convergence.

There are two main goals of this research. One (goal) is to model the impact of selected determinants (trade openness, human resources, entrepreneurship and innovation) on the competitiveness of the regions of Serbia, Croatia, Slovenia, Montenegro, Northern Macedonia and Romania, by using the multiple linear regression model. The second goal is to propose activities that need to be implemented in order to improve the competitive performance of the region in the covered countries.

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